

ABSTRACT OF THE INVENTION

A three-terminal filter using the area flexural vibration mode is smaller than filters using the area expansion vibration mode or the length vibration mode, and is easily adjusted to produce a desired frequency by changing the thickness and length of the three-terminal filter. The three-terminal filter includes three electrodes having a substantially square shape, and two piezoelectric layers having a substantially square shape, which are alternately laminated. The piezoelectric layers are polarized in the same thickness direction as the thickness direction, or in opposite thickness directions. The three-terminal filter further includes one surface electrode that functions as an input electrode, another surface electrode that functions as an output electrode, and an internal electrode that functions as a ground electrode.